

## FIG. 1 PRIOR ART

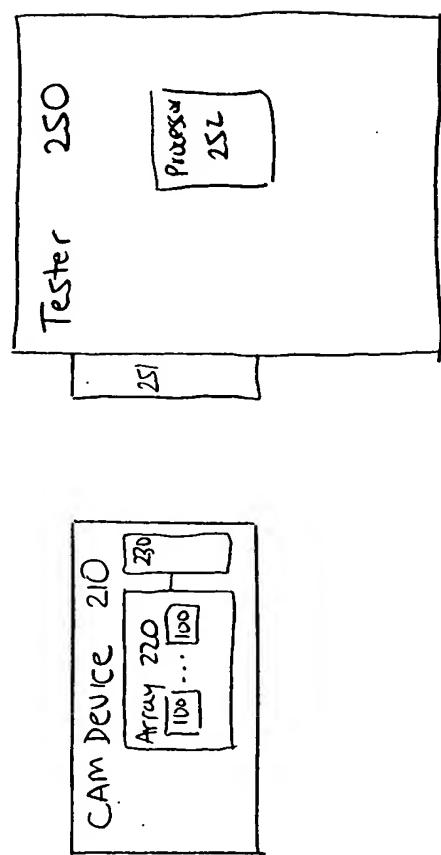


Fig. 2

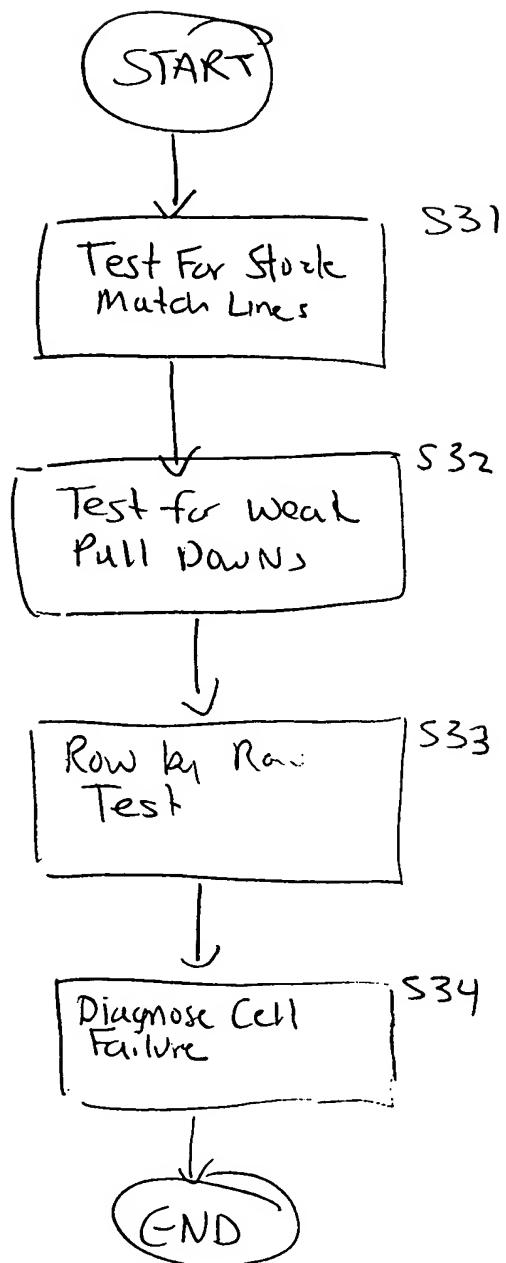


FIG. 3.

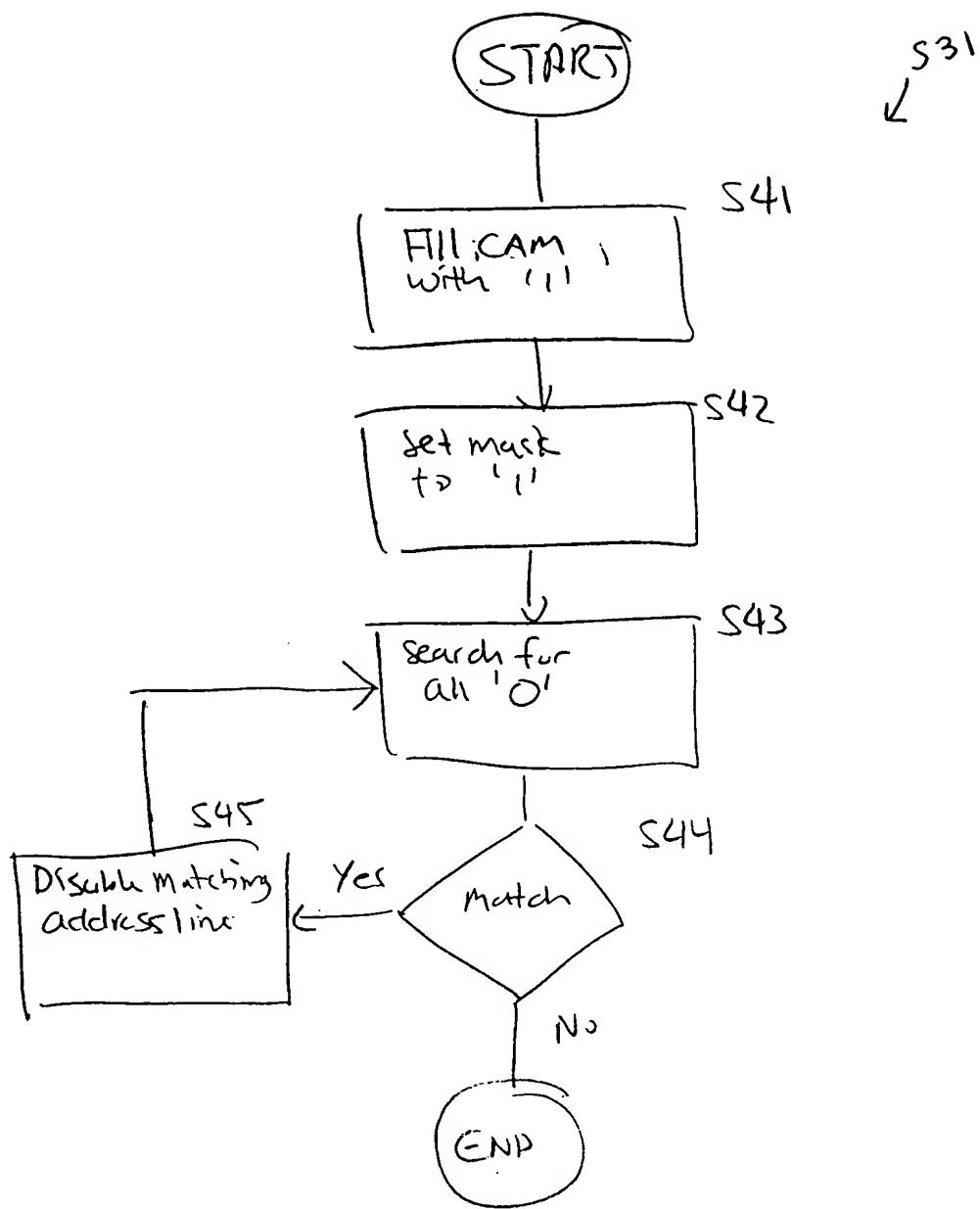
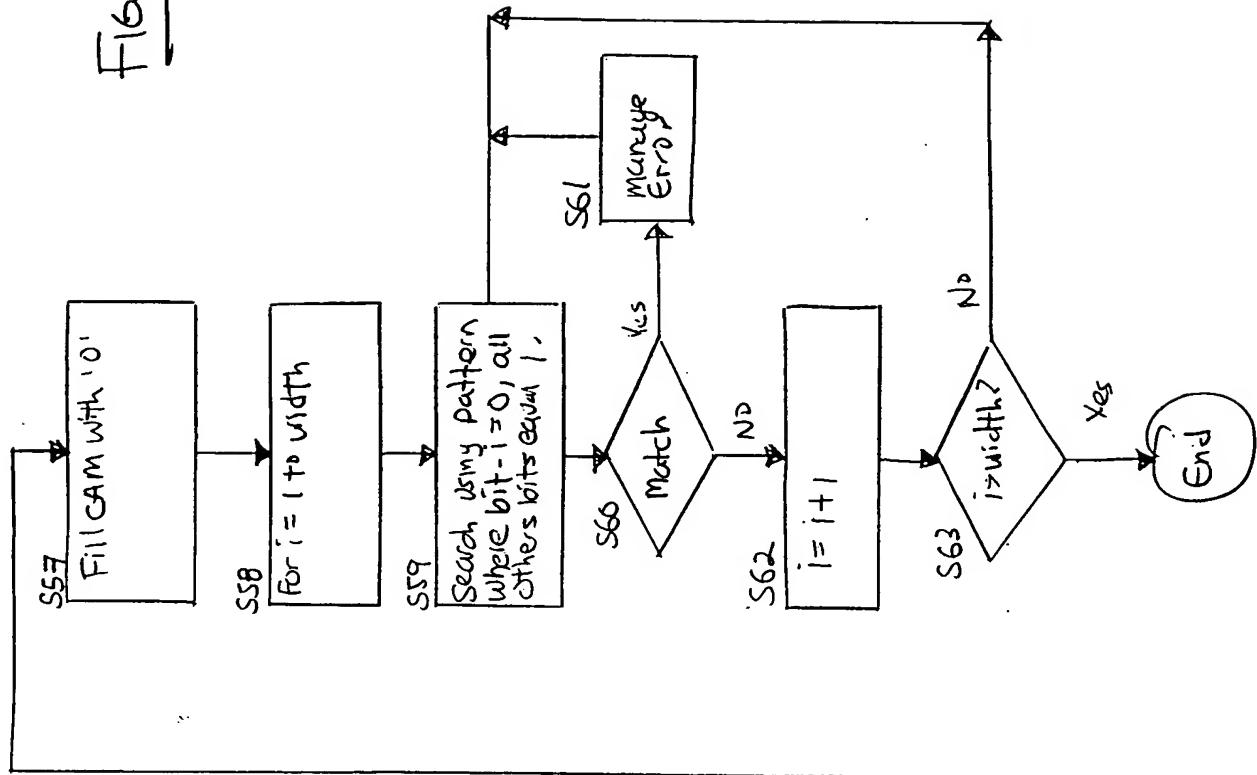


FIG. 4.

S32

Fig 5



Start

S51  
For  $i = 1$  to width

S52  
Search using pattern where  
bit  $i = 1$ , all other bits  
equal to zero

S53

Match?  
Yes: Manage Error  
No:  $i = i + 1$

S55  
 $i = i + 1$

S56  
 $i > width?$

Yes

No

End

End

533

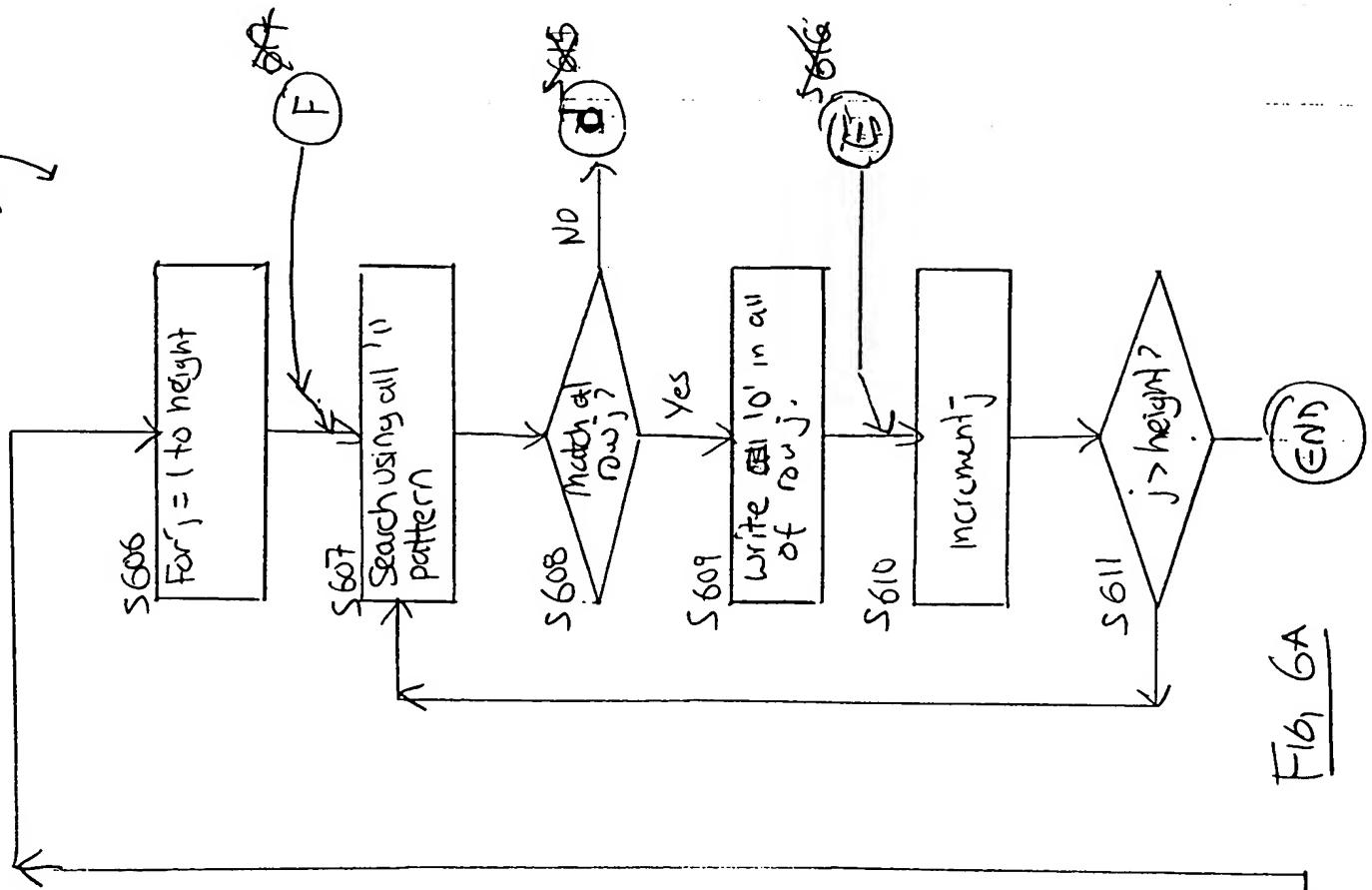


Fig 6A

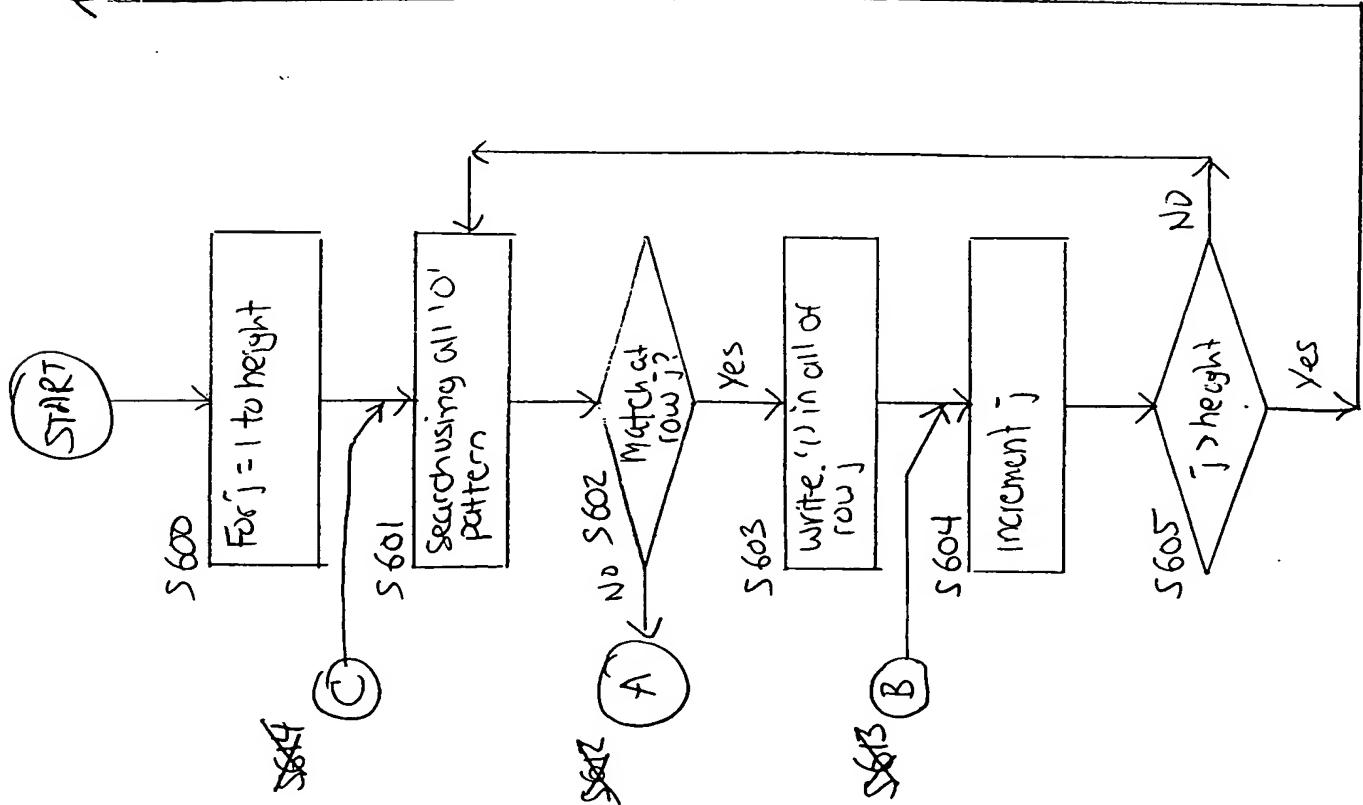


Fig 6 R

Start

(A)

S 620  $\rightarrow$  For  $k = 1$  to width

S 621 At row  $j$ , write '0' to bit  $k$  and '1' to all other bits of row  $j$

S 622 Search using pattern with '0' at bit  $k$  and '1' at all other positions

S 623 Match at row  $j$ ?

Yes  $\rightarrow$  Increment  $k$

No  $\rightarrow$  S 627

S 625 Write all 0 to row  $j$

Yes  $\rightarrow$  S 628

Yes: defect not found  
Error: defect found

Stop

Start

(B)

Stop

Start

(C)

S 629 For  $k = 1$  to width

S 630 At row  $j$ , write '1' to bit  $k$  and '0' to all other bits of row  $j$

S 631 Search using pattern with '1' at bit  $k$  and '0' at all other positions

S 632 Match at row  $j$ ?

S 633 Repair or Disable

Yes  $\rightarrow$  S 635  
No  $\rightarrow$  S 636

S 637  
Yes: defect found  
No: S 634

S 634 Write all 1 to row  $j$

Stop

(D)

Start

(E)

S 620 For  $k = 1$  to width

S 621 At row  $j$ , write '0' to bit  $k$  and '1' to all other bits of row  $j$

S 622 Search using pattern with '0' at bit  $k$  and '1' at all other positions

S 623 Match at row  $j$ ?

S 624 Repair or Disable

Yes  $\rightarrow$  S 625  
No  $\rightarrow$  S 626

S 637  
Yes: defect found  
No: S 634

S 634 Write all 1 to row  $j$

Stop

(F)